For this assignment, I chose Python as the programming language. To make sure the code is easy to read, consistent, and simple to maintain, I researched common Python coding and documentation standards and applied them to my work. The main standards I used were PEP 8 for naming variables and functions, and PEP 257 for documenting functions.

PEP 8 outlines widely accepted rules for writing clean and readable Python code. Following this standard, variable and function names are written in snake_case, which uses lowercase letters and underscores (such as weight_pounds or calculate_bmi). Constants are written in all capital letters with underscores, like POUNDS_TO_KG. Using these naming conventions makes the code easier to follow and helps reduce confusion, especially when working with multiple variables or unit conversions.

For function documentation, I followed the PEP 257 standard, which encourages the use of docstrings to explain what a function does, along with its inputs and outputs. I also used a simple structured format similar to the Google Python Style Guide to clearly separate arguments and return values. This makes each function easier to understand at a glance.

Overall, using these standards improves the clarity and organization of the code. Clear variable names help prevent mistakes, and consistent documentation makes it easier for others to understand how the program works. In a learning environment, these standards also make code easier to review and grade, while encouraging good programming habits that are useful long-term.

Sources:

PEP 8 – Style Guide for Python Code: https://peps.python.org/pep-0008/

PEP 257 – Docstring Conventions: https://peps.python.org/pep-0257/

Google Python Style Guide: https://google.github.io/styleguide/pyguide.html

Wikiversity – Applied Programming: Variables (BMI assignment):

https://en.wikiversity.org/wiki/Applied_Programming/Variables